Igor Sedov

List of Publications by Year in descending order

64 papers	532 citations	686830 13 h-index	794141 19 g-index
64 all docs	64 docs citations	64 times ranked	287 citing authors

#	Article	IF	Citations
1	Structurally uniform 1-hexene, 1-octene, and 1-decene oligomers: Zirconocene/MAO-catalyzed preparation, characterization, and prospects of their use as low-viscosity low-temperature oil base stocks. Applied Catalysis A: General, 2018, 549, 40-50.	2.2	56
2	New concept for small-scale GTL. Chemical Engineering Journal, 2015, 282, 206-212.	6.6	35
3	Hydrogen Storage Using Liquid Organic Carriers. Russian Journal of Applied Chemistry, 2020, 93, 1815-1830.	0.1	28
4	A Comprehensive Review on the Prospects of Using Hydrogenâ€“Methane Blends: Challenges and Opportunities. Energies, 2022, 15, 2265.	1.6	26
5	Matrix conversion of natural gas to syngas: The main parameters of the process and possible applications. Chemical Engineering Journal, 2019, 377, 120883.	6.6	25
6	5,6-Dihydrodibenzo[c,e][1,2]azaphosphinine-Based PNP Ligands, Cr(0) Coordination, and Cr(III) Precatalysts for Ethylene Oligomerization. Organometallics, 2018, 37, 2660-2664.	1.1	21
7	Kinetic features and industrial prospects of the selective oxidative cracking of light alkanes. Russian Chemical Reviews, 2017, 86, 47-74.	2.5	18
8	Utilization of renewable sources of biogas for small-scale production of liquid fuels. Catalysis Today, 2021, 379, 23-27.	2.2	18
9	The role of homogeneous steam reforming of acetylene in the partial oxidation of methane to syngas in matrix type converters. Chemical Engineering Science, 2019, 207, 744-751.	1.9	17
10	Prospects of Conversion of Hydrocarbon Gases to Liquid Products Based on Nitrogen-Rich Synthesis Gas (Review). Petroleum Chemistry, 2019, 59, 370-379.	0.4	17
11	Platinum Group Metal-Catalysed Carbonylation as the Basis of Alternative Gas-To-Liquids Processes. Johnson Matthey Technology Review, 2015, 59, 14-25.	0.5	16
12	Single-site catalysts in the industrial production of polyethylene. Catalysis in Industry, 2012, 4, 129-140.	0.3	14
13	Experimental studies of natural gas to synthesis gas converters based on permeable cavity matrices. Russian Journal of Applied Chemistry, 2016, 89, 1816-1824.	0.1	14
14	Slurry reactor system with inertial separation for Fischerâ€Tropsch synthesis and other threeâ€phase hydrogenation processes. Canadian Journal of Chemical Engineering, 2016, 94, 518-523.	0.9	14
15	Adjustment of the fuel characteristics of wet and associated petroleum gases by partial oxidation of C2+ hydrocarbons. Petroleum Chemistry, 2017, 57, 236-243.	0.4	11
16	Analysis of the State and Development Prospects of the Industrial Catalysts Market for Polyolefins Production. Russian Journal of General Chemistry, 2020, 90, 1141-1162.	0.3	11
17	Non-Catalytic Steam Reforming of C1â€“C4 Hydrocarbons. Petroleum Chemistry, 2021, 61, 762-772.	0.4	11
18	Hydrogenation/Dehydrogenation Catalysts for Hydrogen Storage Systems Based on Liquid Organic Carriers (A Review). Petroleum Chemistry, 2021, 61, 977-988.	0.4	11

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19	Application of Supercritical Fluid Technologies in Chemical and Petrochemical Industries (Review). Petroleum Chemistry, 2020, 60, 244-254.	0.4	10
20	Mixed and hybrid multisite catalysts for ethylene polymerization. Russian Chemical Reviews, 2012, 81, 239-257.	2.5	9
21	New Potentialities for Utilization of Associated Petroleum Gases in Power Generation and Chemicals Production. Eurasian Chemico-Technological Journal, 2017, 19, 265.	0.3	9
22	Current state and prospects of development of technologies for the production of superhydrophobic materials and coatings. Nanotechnologies in Russia, 2016, 11, 679-695.	0.7	8
23	State of the Global Market of Bimodal Polyethylenes and the Basic Technologies for Their Production. Russian Journal of General Chemistry, 2021, 91, 571-581.	0.3	8
24	Market Potential of Industrial Technologies for Production of Synthetic Bases of Motor Oils. Russian Journal of General Chemistry, 2021, 91, 1243-1259.	0.3	7
25	The State and Development Prospects of the Global Hydrogen Energy Sector. Russian Journal of General Chemistry, 2021, 91, 1912-1928.	0.3	7
26	Comparison of Various Options for Designing the Direct Oxidation of Methane to Methanol. Russian Journal of Applied Chemistry, 2021, 94, 509-517.	0.1	6
27	Physical Methods for Studying Chemical Reactions: New Non-Catalytic Methods for Processing Hydrocarbon Gases. Russian Journal of Physical Chemistry B, 2021, 15, 498-505.	0.2	6
28	The Fuel of Our Future: Hydrogen or Methane?. Methane, 2022, 1, 96-106.	0.8	6
29	New horizons of small-tonnage gas chemistry. Herald of the Russian Academy of Sciences, 2016, 86, 329-336.	0.2	5
30	Oxidative conversion of wet and associated gases to fuels for power plants. Journal of Natural Gas Science and Engineering, 2016, 31, 9-14.	2.1	5
31	Experimental approvement of the filterless hydroprocess technology using slurry reactor system with inertial separation. Separation and Purification Technology, 2017, 186, 342-351.	3.9	5
32	Development of Technologies for More Efficient Deep Processing of Natural Gas. Russian Journal of Applied Chemistry, 2018, 91, 1922-1936.	0.1	5
33	Production of Ethylene, CO, and Hydrogen by Oxidative Cracking of Oil Refinery Gas Components. Russian Journal of Applied Chemistry, 2018, 91, 2065-2075.	0.1	5
34	Effect of Hydrogen, Carbon Monoxide, Synthesis Gas, and Steam Additives on the Characteristics of Matrix Conversion of Rich Methaneâ€“Oxygen Mixtures. Petroleum Chemistry, 2020, 60, 818-826.	0.4	5
35	Thermodynamic Evaluation of Noncatalytic Conversion of Natural Gas with the Production of Synthesis Gas. Russian Journal of Physical Chemistry B, 2021, 15, 969-976.	0.2	5
36	Highly Porous Materials as Potential Components of Natural Gas Storage Systems: Part 1 (A Review). Petroleum Chemistry, 2022, 62, 561-582.	0.4	5

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37	Polymerization of ethylene with the (C5H5)4Zr-methylaluminoxane soluble catalytic system. Polymer Science - Series B, 2007, 49, 85-90.	0.3	4
38	Dual-site hybrid catalysts for production of linear low-density polyethylene. Journal of Polymer Research, 2014, 21, 1.	1.2	4
39	Analysis of the Fundamental Aspects of Oxidation of Rich Methane Mixtures in Matrix-Type Converters. Russian Journal of Applied Chemistry, 2018, 91, 1500-1512.	0.1	4
40	Catalytic Reactors for Dehydrogenation of Liquid Organic Hydrogen Carriers. Russian Journal of Applied Chemistry, 2021, 94, 1011-1021.	0.1	4
41	Equilibrium Composition of Products Formed by Non-catalytic Conversion of Hydrocarbons. Petroleum Chemistry, 0, , .	0.4	4
42	Ethylene polymerization initiated by metallocene catalysts (C5H5)4Mt-MAO (Mt = Ti, Zr) in the presence of organometallic modifiers. Polymer Science - Series B, 2010, 52, 63-66.	0.3	3
43	Development of Functional Polymer Coatings Using Supercritical Fluids: Technologies, Markets, and Prospects. Russian Journal of Physical Chemistry B, 2018, 12, 1132-1143.	0.2	3
44	Catalytic Reactions of Homo- and Cross-Condensation of Ethanal and Propanal. Petroleum Chemistry, 2018, 58, 1032-1035.	0.4	3
45	Oxidative Cracking of Oil Refinery Gases. Russian Journal of Applied Chemistry, 2019, 92, 1745-1750.	0.1	3
46	Cost-Effectiveness Assessment of the Scale of Hydrogen Production by Various Methods. Russian Journal of General Chemistry, 2021, 91, 2743-2757.	0.3	3
47	Perspective tendencies in development of small scale processing of gas resources. Pure and Applied Chemistry, 2017, 89, 1033-1047.	0.9	2
48	Kinetics of Ternary Copolymerization of Carbon Dioxide with Propylene Oxide, Butene Oxide, and Cyclohexene Oxide. Polymer Science - Series B, 2019, 61, 395-403.	0.3	2
49	Activity of a New Chromium(III) Complex with a Pentadentate (N3O2) Schiff-Base Ligand in the Reaction of Carbon Dioxide with Propylene Oxide. Kinetics and Catalysis, 2021, 62, 428-435.	0.3	2
50	EFFECT OF STEAM ADDITION ON THE PROCESS OF MATRIX CONVERSION OF METHANE TO SYNGAS. Gorenie I Vzryv (Moskva) â€" Combustion and Explosion, 2018, 11, 18-23.	0.1	2
51	Gas-Phase Oxidation of Natural and Associated Gases. Catalysis in Industry, 2022, 14, 1-10.	0.3	2
52	Ethylene polymerization and copolymerization with hexene-1 on supported metallocene catalysts based on (C5H5)4Zr and methylaluminoxane. Polymer Science - Series A, 2007, 49, 496-502.	0.4	1
53	Photophysical, electronic, and catalytic properties of tetracyclopentadienylzirconium. Doklady Physical Chemistry, 2010, 434, 177-179.	0.2	1
54	Reactions of methylaluminoxane and trimethylaluminum with zirconium and titanium tetracyclopentadienyl derivatives. Russian Chemical Bulletin, 2011, 60, 1880-1884.	0.4	1

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55	Effect of Hydrogen Addition on Oxidative Cracking of Ethane. Russian Journal of Applied Chemistry, 2018, 91, 1767-1772.	0.1	1
56	Membrane Absorption of Ethylene from a Mixture with Ethane Using MDK-3 Composite Membranes. Russian Journal of Applied Chemistry, 2019, 92, 1826-1834.	0.1	1
57	Kinetics of Carbon Dioxide Terpolymerization with Propylene Oxide and Hexene Oxide. Kinetics and Catalysis, 2020, 61, 569-574.	0.3	1
58	Processing of natural and casing-head gases by the gas-phase oxidation. Kataliz V Promyshlennosti, 2021, 21, 227-237.	0.2	1
59	Production of Hydrogen from Propaneâ€“Butane Mixture in a Combined Process of Matrix and Steam Conversion. Russian Journal of Applied Chemistry, 2021, 94, 927-933.	0.1	1
60	Technologies for producing liquid motor fuels from wastes of renewable vegetable resources. Polymer Science - Series D, 2011, 4, 252-258.	0.2	0
61	Synthesis of tris(cyclopentadienyl)zirconium tetrakis(pentafluorophenyl)borate. Russian Chemical Bulletin, 2016, 65, 2708-2711.	0.4	0
62	Mechanism of the interaction of components in the metallocene catalytic systems containing titanium and zirconium tetracyclopentadienyls and methylaluminoxane. Reaction Kinetics, Mechanisms and Catalysis, 2016, 119, 59-73.	0.8	0
63	Effect of Hydrogen and Carbon Monoxide Additions on Partial Oxidation of Methane at Elevated Pressures. Russian Journal of Applied Chemistry, 2019, 92, 1726-1733.	0.1	0
64	Oxidative Cracking of Propane in the Presence of Hydrogen. Russian Journal of Applied Chemistry, 2021, 94, 787-792.	0.1	0